6- to 10-Day and 8- to 14-day Excessive Heat Outlooks (Contiguous U.S)

Part 1 - Mission Connection

- a. <u>Product/Service Description</u>. The Climate Prediction Center (CPC) issues 6- to 10-Day and 8- to 14-Day excessive heat outlooks in probabilistic format for the Contiguous U.S.
- b. <u>Purpose/Intended Use</u>. This product is intended for planning for potential cumulative heat exposure that could cause significant health risks, especially for a number of the most vulnerable cities.
- c. <u>Audience</u>. The product is for use by health officials and local emergency managers.
- d. <u>Presentation Format</u>. CPC presents the outlooks as charts sent over NWS dissemination systems in "red book graphic" format and on the CPC web site (in GIF charts).
 - e. Feedback. Go to: http://www.cpc.noaa.gov/NWS-feedback-form.html

Part 2 - Technical

a. <u>Format and Science Basis</u>. CPC will issue outlooks of the probability (in percent) of the average calendar day heat index exceeding three different thresholds ($\geq 85^{\circ}F$ for ≥ 3 days; $\geq 90^{\circ}F$ for ≥ 2 days; $\geq 95^{\circ}F$ for ≥ 1 day) during the valid period. The heat index formula is described in NWS Instruction 10-705 (WFO Non-precipitation Weather Products Specification).

CPC will plot dashed probability isoline contours. CPC will shade in probabilities that are greater than 50%.

URLs for 6- 10-Day excessive heat outlooks

 \geq 85°F for \geq 3 days

http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt maps.08.35.a.gif

 \geq 90°F for \geq 2 days

http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt_maps.08.25.a.gif

 $\geq 95^{\circ}$ F for ≥ 1 day

http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt_maps.08.15.a.gif

URLs for 8- 14-Day excessive heat outlooks

 \geq 85°F for \geq 3 days

http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.37.a.gif

 \geq 90°F for \geq 2 days

http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.27.a.gif

 \geq 95°F for \geq 1 day

http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.17.a.gif

b. <u>Availability</u>. These are scheduled products issued daily around 4:00 p.m. Eastern Local Time from April 1 through September 30. CPC does not issue updates or amendments. They will issue corrections as needed. They are issued on NWS dissemination systems under the following product IDs:

Average Daily	6- to10- Day		8- to 14-Day	
Heat Index threshold	WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
\geq 85°F for \geq 3 days	PTAS90 KWNC	RBGHI4	PTAT90 KWNC	RBGHI7
≥90°F for ≥2 days	PTAS95 KWNC	RBGHI5	PTAT95 KWNC	RBGHI8
\geq 95°F for \geq 1 day	PTAS00 KWNC	RBGHI6	PTAT00 KWNC	RBGHI9

They are also issued on the CPC web site at URLs listed in section a.

c. <u>Other Information</u>.

<u>Valid Time</u>. The valid time is the 6- to 10-day or 8- to 14-day period after issuance.

<u>Product Expiration Time</u>. The outlooks expire 24 hours later with issuance of the next 6- to 10-Day or 8- to 14-Day Excessive Heat Outlooks.

<u>Creation Software</u>. CPC will use GEMPAK software as an input into both NAWIPS and to create GIFs for the internet.